Reply to Office Action of June 2, 2005

# REMARKS

Claim 1-68 are currently pending in the application; with claims 1, 11, 30, 43, 59, and 65 being independent. Claims 1, 11, 30, and 43 have been amended to better define the present invention. Claims 59-68 have been added to define additional features of the present invention.

Applicants respectfully request reconsideration in light of the amendments and remarks contained herein, and earnestly seek timely allowance of the pending claims.

## Allowable Subject Matter

The Examiner indicated that claims 5, 10, 16, and 47 were directed to allowable subject matter, but were objected to as being dependent upon a rejected base claim. Applicants wish to thank the Examiner for the indication of allowable subject matter.

#### Claim Rejections – 35 USC §102

The outstanding Office Action indicated that claims 1-4, 6-9, 11-15, 17-24, 26, 28-39, 41-46, and 48-50 are rejected under 35 USC 102(e) as being anticipated by US Patent No. 6,367,015 to Kubo et al. ("Kubo"). Applicants respectfully traverse this rejection.

Kubo merely discloses an authentication apparatus, which receives coordinates from a coordinate detector through a plurality of discontinuous holes or openings, cutouts or marks provided on a member, which is used to specify the coordinates to be detected. An authentication is performed based upon a comparison result of the detected coordinates and a plurality of registered coordinates. (See abstract.) Specifically, Kubo discloses a coordinate detecting micro-computer 4, which reads coordinate inputs provided by a user through a coordinate detector 6. A CPU 1 compares a plurality of detected coordinates with a plurality of registered coordinates, and carries out an authentication based upon the compared result (col. 5, lines 44-48; Fig. 1).

Kubo further discloses a card provided with a plurality of discontinuous holes or openings, cutouts or marks, which may be placed on the coordinate detector 6, and the coordinate detecting micro computer 4 may read the input coordinates based on inputs made via the hole openings, cutouts or marks (col. 5, lines 59-60; Fig. 5a). The card is placed in a specified region on the coordinate detector 6, the specified region may be a predetermined region decided by a random number. (See col. 6, lines 12-23.) For example, Fig. 5a shows a screen image of a touch panel. The touch panel may be a CRT with a transparent digitizer or tablet arranged on the display. The displayed card frame 12 provides a location to place the card, and may be presented anywhere on the screen 11, including the four corners of the screen 11.

Two points (point No. 1 and 2) are specified as reference coordinate values and are registered with respect to each location number, as shown in Fig. 5b. (See col. 12, lines 1-13; Figs. 5a and 5b.) These two points, which determine the position where the card frame 12 is to be displayed on the screen 11, may be generated as random numbers to one of the locations Nos. 1-4 at the four corners of the screen 11. Once card frame 12 is determined to be one of the four locations by the random number and displayed on screen 11, the user places the card in the displayed card frame 12. The user enters input coordinates by pushing cutouts of the card using a pen. It is judged that the authentication is acceptable if the input coordinates match the registered data (col. 12, lines 24-37; Figs. 5a and 5b).

In another embodiment, Kubo shows the card position on a screen of the touch panel.

The card position (X0, Y0) is arbitrarily determined by a random number. The card frame 12 is displayed as shown in Fig. 10a using the card position (X0, Y0) as the origin. The card is placed in the displayed card frame 12, and the coordinates are input by pushing the positions of the openings or marks of the card using a pen (col. 15, lines 61-67; Fig. 10). Fig. 10b shows the coordinates within the card. The bottom left of the card is regarded as the origin (0, 0), and the coordinates of the four points are shown as in Fig. 10b. The card frame 12 shown in Fig. 10a is arranged so that the origin (0, 0) of the card matches the origin (X0, Y0) which is determined by a random number on the screen 11. Hence, the step S82 shown in Fig. 9 calculates the comparison coordinates of the four points by adding the coordinates of the origin (X0, Y0) (col. 16, lines 1-8; Figs. 9, 10b). Fig. 10c shows the registered data, where the point Nos. 1-4 correspond to the four points specified within the card shown in Fig. 10b. The card origin (X0, Y0) is the origin which is determined by the random number used to display the card frame 12 on the screen 11 in Fig. 10a. The coordinate values within the card correspond to the coordinate values of the four points within the card shown in Fig. 10b. Comparison coordinate values are respectively calculated by adding the coordinate values of the four points within the card shown in Fig. 10b as the origin X (X0, Y0). The authentication is judged as being acceptable if the coordinate values which are actually obtained match the comparison coordinate values, and the authentication is judged as not being acceptable if the coordinate values which are actually obtained do not match the comparison coordinate values. (See col. 16, lines 9-33.)

However, Kubo fails to disclose, at least, "reading at least one pair of absolute coordinates from an encoded base," as recited in claim 1; "a user unit for reading at least one pair of absolute coordinates," as recited in claim 11; "a processor operative to: receive at least one

pair of absolute coordinates," as recited in claim 30, and "reading at least one pair of absolute coordinates from a base," as recited in claim 43.

Kubo is distinguished by the present invention in that the coordinates entered by the user through card 11 are merely <u>relative</u> coordinates which are subsequently translated by adding the card origin (X0, Y0) as an offset. These translated coordinates, which are called "comparison coordinates," are used to compare with the registered data for authentication. (See Figs. 9 and 10c.) The card disclosed by Kubo therefore does not provide absolute coordinates, but merely relative coordinates. Moreover, these relative coordinates are merely provided by virtue of their relative physical spacing of the holes or marks provided on the card itself, and are not provided through any type of encoding. (See Fig. 10b.)

Accordingly, Applicants respectfully request the Examiner to withdraw the rejections of claims 1, 11, 30, and 43. Claims 2-4, 6-9, and 53-54 depend from claim 1 and are allowable at least by virtue of their dependency from allowable claim 1; claims 12-15, 17-29, 55-56, and 58 depend from allowable claim 11 and are allowable at least by virtue of their dependency; claims 31-42 depend from claim 30 and are allowable at least by virtue of their dependency from allowable claim 30; and claims 44-46, 48-52, and 57 depend from claim 43 and are allowable by virtue of their dependency from claim 43.

### Claim Rejections – 35 USC §103

The Examiner rejected claims 25, 27, and 40 under 35 USC 103(a) as being unpatentable over Kubo. Applicants submit the Examiner failed to provide a *prima facie* case of obviousness

and traverse this rejection.

Regarding claims 25, 27 and 40, the Examiner admits that Kubo does not "specifically disclose a wireless communication unit in communication with a network access unit in communication with the server unit." The Examiner attempts to cure the deficiencies of Kubo by taking Official Notice that "wireless communication unit in communication with a network access unit in communication with the server unit is well known in the art." (See Office Action, pages 8-9, paragraph 3.) Applicants hereby traverse the Official Notice and request that the Examiner either provide a competent prior art reference supporting the rejection, an affidavit in support of the Examiner's assertion, or withdraw the rejection of these claims.

#### Conclusion

In view of the above amendments and remarks, this application appears to be in condition for allowance and the Examiner is, therefore, requested to reexamine the application and pass the claims to issue.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at telephone number (703) 205-8000, which is located in the Washington, DC area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional

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fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted

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